

## IN THE CLAIMS

Please amend the claims as follows:

--1. (currently Amended) A method for forming metallization and contact structures in an integrated circuit comprising in sequential order:

a) etching a trench dielectric layer of a composite structure comprising in sequential order:

i) a semiconductor substrate comprising an active region, a gate structure thereover, and dielectric spacers adjacent to said gate structure;

ii) a substantially planar contact dielectric layer; and

iii) a trench dielectric layer; and

iv) a patterned photoresist;

to form a trench in said trench dielectric layer under etch conditions which do not substantially etch said substantially planar contact dielectric layer;

a') removing said patterned photoresist;

a'') forming a contact opening mask;

b) etching said substantially planar contact dielectric layer under conditions which do not substantially damage said gate structure to form a first contact opening that exposes a region of said semiconductor substrate and a portion of at least one of said dielectric spacers; and

c) depositing a conductive material into said first contact opening and said trench forming a contact structure in said first contact opening and a metallization in said trench.

2. (Original) The method of claim 1, further comprising forming a second contact opening in said trench dielectric layer corresponding to said first contact opening.

3. (canceled)
4. (canceled)
5. (Original) The method of claim 2, wherein said trench dielectric layer has a thickness at least 100 Å greater than that of said trench.
6. (Original) The method of claim 1, wherein etching said contact dielectric layer is conducted under conditions providing an etch rate of at least 5:1 relative to that of said gate structure.
7. (Original) The method of claim 1, further comprising forming a liner, wetting and/or barrier layer in said first contact opening and said trench.
8. (Original) The method of claim 7, wherein said liner, wetting and/or barrier layer has a thickness of from 50 Å to 1000 Å.
9. (currently amended) The method of claim ~~7~~ 1, wherein said liner, wetting and/or barrier layer comprises a material selected from the group consisting of titanium, zirconium, hafnium, tantalum, chromium, molybdenum, tungsten, copper, nickel, cobalt, ruthenium, rhodium, palladium, osmium, iridium, platinum, gold, silver, titanium-tungsten, tantalum nitride and titanium nitride.
10. (Original) The method of claim 1, wherein said conductive material is selected from the group consisting of tungsten, aluminum, copper and alloys of one of said metals.
11. (Original) The method of claim 1, further comprising removing said conductive material until its uppermost surface is substantially coplanar with an uppermost surface of said trench dielectric layer.
12. (Original) The method of claim 11, further comprising depositing an interlayer dielectric layer over said coplanar conductive material and said trench dielectric layer.
13. (original) The method of claim 1, wherein said composite structure further

comprises an anti-reflective coating disposed between said trench dielectric layer and said patterned photoresist.

14. (Original) The method of claim 13, wherein said anti-reflective coating comprises an organic anti-reflective coating.

15. (Original) The method of claim 13, wherein said anti-reflective coating comprises a dielectric anti-reflective coating.

16. (Original) The method of claim 1, wherein said trench dielectric layer comprises an undoped silicate glass layer.

17. (Original) The method of claim 1, wherein said contact dielectric layer comprises a doped silicate glass.

18. (currently amended) The method of claim 17, wherein said doped ~~silica-oxide~~ silicate glass contact dielectric layer comprises a member selected from the group consisting of a phosphosilicate glass, a borophosphosilicate glass and a fluorosilicate glass.

### SUPPORT FOR THE AMENDMENT

Support for the amendment to claim 1 is found in claims 3 and 4 as originally presented, on page 6, lines 8-9, page 10, line 1, on page 11, line 16 through page 15, line 31 of the specification. No new matter would be added to this application by entry of this amendment.

Upon entry of this amendment, claims 1, 2 and 5-18 will now be active in this application.

### REQUEST FOR RECONSIDERATION

The present application is a continuation application of co-pending application 09/593,967 filed on June 15, 2000, now U.S. 6,635,566 and is directed to a method of forming metallization and contact structures in an integrated circuit. The claims as presently presented are intended to be identical with those of U.S. 6,635,566 and are being submitted in order to obtain consideration of the information disclosure statement filed in the U.S. 09/593,967 on October 14, 2003. On September 22, 2003, Applicants' European representative received a European Search report. This search report was timely submitted for consideration to the U.S. patent office in U.S. 09/593,967 on October 14, 2003. However, U.S. 09/593,967 issued as U.S. 6,635,566 on October 21, 2003, before the USPTO was able to indicate consideration of the Information Disclosure Statement filed on October 14, 2003. The present application has been filed in order to ensure consideration of the IDS.

Should the examiner determine the above-identified application to be allowable in view of the three references cited in the European Search Report (U.S. 6,492,665, JP 2000/10643 and WO 0022671) then the only remaining issue would be a statutory double patenting rejection. Notification of such action is earnestly solicited.

Applicants submit this application is now in condition for examination on the merits  
and early notification of such action is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



Richard L. Chinn, Ph.D.  
Attorney of Record  
Registration No. 34,305



**22850**

Telephone: (703) 413-3000  
Facsimile.: (703) 413-2220  
RLC:dbl